The Influence of Tax Fairness and Communication on Voluntary Compliance: Trust as an Intervening Variable

Fadjar O.P. Siahaan
Expert Staff in Indonesian Supreme Audit Institution
Airlangga University Surabaya
Indonesia

Abstract

The aim of this study is to examine indirect effect of tax fairness, communication and trust on voluntary behavior. This study was conducted in Surabaya, East Java. The respondents of the study are individual taxpayer working in service industries. Sixty one taxpayers participated in this study. The findings of this study show that: (1) the direct and indirect effect of tax fairness on voluntary compliance is positive and significant (2) the direct and indirect effect of communication on voluntary compliance is insignificant. This study contributes not only to the research literature but also to help tax institution to develop strategies toward improving compliance.

Keywords: tax fairness, communication, trust, voluntary compliance.

1. Introduction

Tax cheating is as old as tax laws. Despite the long history of resistance to taxation, however, knowledge of the determinants of compliance behavior is quite limited. For decades, tax researchers have investigated why some people pay taxes and others do not. Through experiments, random surveys, and available tax databases, researchers have identified characteristics of noncompliant taxpayers and factors that motivate tax compliance. In recent years, research interest in the area of taxpayers’ voluntary compliance has grown considerably. Prior researchers have examined how individual compliance is affected by age (Tittle, 1980; Grasmick et al., 1984), Sex (Minor, 1978; Grasmick and Scott, 1980), income source (Madeo et al., 1985), occupation (Mason and Calvin, 1978; Westat, 1980), fairness (Yankelovich et al. 1984; Etzioni, 1986), complexity (Sanders and Wyndells, 1989; Magro, 1999; Spilker et al., 1999), tax rates (Mason and Calvin, 1984; Keller, 1998), tax compliance costs (Nam, 2002), audit adjustments (Chan and Mo, 2002) and moral obligation (Bobek and Hatfield, 2003).

Despite these researches, there has been little research directed to study tax fairness, communication and trust for predicting voluntary compliance. Fairness is perceived as a basic entitlement, consequently instances of perceived unfairness produce intense personal emotions. When taxpayers perceive unfairness they will react by trying not to pay taxes. Etzioni (1986) argues that if a public feels increasingly over time that taxes are unfairly imposed, it will be increasingly likely to evade paying taxes. Studies in tax fairness and its influence to compliance behavior have been done by Bradley (1994). His findings show that tax evasion increased, as the percentage of taxpayers considering taxes unfair.

It is also argued that tax fairness has a possibility to indirectly influence voluntary compliance through trust. For many years, trust has been discussed as a variable that crucial for organizational effectiveness (Gomez and Rosen, 2001). Trust is at the heart or organizational coordination and control (Mc Allister, 1995). Trust means a positive expectation that another (through words, actions, or decisions) will not act opportunistically (Robbins, 2001:336). Furthermore, when taxpayers trust a tax institution, they are willing to be vulnerable to the tax institution’s actions, confident that their rights and interests will not be abused (Hosmer, 1995; Mayer et al., 1995). Taxpayers can trust revenue body (tax institution) when they know and understand the goals of the institution. When there is a hidden agenda, there is no trust. In other words trust is the key to success for the tax institution to acquire taxpayers’ compliance. Trust promoting positive attitude toward tax institution, and ultimately increase voluntary compliance.
Beside tax fairness and trust, another variable which is also identified to have an impact on voluntary compliance is communication. Tax information needs to be communicated properly to the taxpayers, for example is information about tax return, tax audit. James, Betty and Michael (2004) study the effects of communication among taxpayers on compliance. The results of the study indicate that “unofficial” communication has a strong indirect effect that increases compliance, but that “official” communication may not encourage voluntary compliance. It is also argued that communication has a possibility to indirectly influence voluntary compliance through trust. Research shows that quality of information is associated with higher levels of trust (Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Simons, 2002; Whitener, Brodt, Korsgaard, & Werner, 1998).

The present research is an extension of studies done by previous researchers. The important things that differentiate this study with the others are: (1) the direct effect of tax fairness on voluntary compliance has been examined by previous researchers. This study extended their research by investigating indirect effect of the tax fairness on voluntary compliance through trust, (2) the present study is the first attempt to examine the effect of communication on trust, and the effect of trust on voluntary compliance. This research can provide empirical evidence to assist legislators in the development equitable tax system. A significant methodological contribution of this research is the development of a set of scales for measuring tax fairness and trust that are believed to have an important effect on compliance behavior. To the author’s knowledge, this study is the first attempt to measure these factors using questionnaire, while most of previous researchers examine the variable using experimental research.

2. Hypotheses Development

2.1 Linkages Between Tax Fairness, Trust and Voluntary Compliance

An individual can use different criteria in making ethical choices. One of the criteria is to focus on justice or fairness (Robbins, 2001:144). Fairness is seen as a fundamental human right in social, economic and academic organizations. Since perception is reality to affected individuals, fairness can powerfully influence personal behavior (Henridon, 1992). Fairness is perceived as a basic entitlement, consequently, instances of perceived unfairness could produce intense personal emotions.

Many researchers (e.g. Porcano, 1984; Richardson & Sawyer, 2001; and Jackson & Milliron, 1986) agree that tax fairness is a multidimensional concept. Gerbing (1988) conducted a survey on identifying the dimension of tax fairness and found five fairness dimensions: (i) general fairness/distribution, (ii) exchange with tax institution, (iii) attitude towards taxes of the wealthy, (iv) progressive versus flat tax rate and (v) self interest. Christensen et al., (1994) and Christensen & Weilrich (1996) also found the 5 tax fairness dimensions similar to Gerbing (1988). Jack and Milliron (1986) argue that tax fairness encompasses at least two different dimensions. One dimension appears to involve the equity of trade – the benefits received for the tax dollars given. The other dimension appears to involve the equity of the taxpayer’s burden in reference to the other individuals (taxpayers’ perceptions of the horizontal and vertical equity of the tax system). In the other words, tax liability among taxpayers should be consistent with the ability to pay. Basically, taxpayers who have the same ability to pay must be imposed the same tax liability, while taxpayers who have different ability to pay must be imposed differently.

Based on the review from the previous literatures, basically there two different types of fairness: distributive and procedural fairness. Distributive fairness concerns considerations related to outcomes or the exchange of resources (how taxes are paid and spent). Procedural fairness relates to perceptions about the procedures, i.e. how the system works and how the dealings with the revenue body work (e.g. handling of different cases). Retributive fairness concerns the appropriateness of sanctions when rules or norms are violated. Perceptions of distributive fairness have been shown to affect tax compliance (for an overview see Wenzel, 2003 and Kirchler, 2007). People who experience their tax burden to be higher than others tend to be less compliant with tax laws (e.g. Kinsey, Grasmick & Smith, 1991). Likewise, the more people believe that the tax institution takes good care of their paid taxes and spends it carefully, the more compliant they tend to be. Studies suggest that procedural fairness influences the acceptance of decisions made by the tax authority and builds trust in the tax authority among private taxpayers (Braithwaite, 2003; Murphy, 2004).

Kirchler and Hoelzl (2006) argue that fair treatment of taxpayers and trustworthiness of tax authorities will enhance voluntary compliance. Murphy (2004) shows in a study of accused tax avoiders that there is a correlation between fair and correct treatment of the taxpayer and trust in the revenue body.
Trust is in turn correlated to the willingness to comply. If regulators are seen to be acting fairly, people will trust the motives of that authority, and will defer to their decisions voluntarily. Fairness and trust are thus interlinked and the one cannot exist without the other. These arguments lead to the following hypothesis.

H₁: There is a direct effect of tax fairness on voluntary compliance
H₂: There is an indirect effect of tax fairness on voluntary compliance through trust

2.2 Linkages Between Communication, Trust and Voluntary Compliance

Communication is the activity of conveying information through the exchange of thoughts, messages, or information, as by speech, visuals, signals, writing, or behavior. The fact is that communication is among the most powerful tools that tax institution leaders have. Taxpayers who see and hear and understand their tax institution’s plans for the tax revenue are more likely to pay tax voluntarily. The taxpayers should be informed that money collected from taxes help the government to provide a variety of services to citizens. The information about tax audit would also put pressure on the taxpayers to comply the tax system.

Communication plays an important role in the development of trust within an organization. Several studies have demonstrated the central role that communication plays in developing and maintaining trust. Trust and communication have been shown to enhance such organizational outcomes as employee participation and job performance (Dirks, 1999; Dirks & Ferrin, 2001; Ellis & Shockley-Zalabak, 2001; Kramer, 1996; Pincus, 1986; Ruppel & Harrington, 2000). Two particular aspects of information sharing that are often discussed in the literature are quality of information and quantity of information. Quality of information tends to be operationalized in terms of accuracy, timeliness, and usefulness. Research shows that quality of information is associated with higher levels of trust (Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Sapienza & Korsgaard, 1996; Simons, 2002; Whitener, Brodt, Korsgaard, & Werner, 1998). Taxpayers will exhibit higher levels of trust when they believe the information they are receiving from the tax institution is accurate, timely, and/or useful because amount of information reduces vulnerability. Quantity of information or information adequacy speaks to whether taxpayers feel adequately informed. Thus these arguments suggest that a strong relationship exists between communication and trust.

H₃: There is a direct effect of communication on voluntary compliance
H₄: There is an indirect effect of communication on voluntary compliance through trust

Based on the arguments developed above, the model proposed in the present study is as follows:

![Figure 1: The Model of the Present Study](image-url)
3. Research Method

3.1. Population and Sample

The population of this study is individual taxpayers working in service industry in Surabaya – East Java. These taxpayers must have worked in the company at least one year, the criteria is important in order to make sure that they understand the tax law which prevails in Indonesia. A total of 100 questionnaires were sent and 67 questionnaires were returned, making a response rate 67%. From the total questionnaire received, 6 questionnaires were excluded from the study for incomplete responses. This left the study with 61 usable questionnaires for data analysis. Table 1 below provides demographic data collected from the respondents which encompass gender, age, last formal education and educational background.

Table 1: Demographic Data of the Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>21 to 30</td>
<td>2</td>
</tr>
<tr>
<td>31 to 40</td>
<td>29</td>
</tr>
<tr>
<td>Over 40</td>
<td>30</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
</tr>
<tr>
<td>Male</td>
<td>36</td>
</tr>
<tr>
<td><strong>Educational background</strong></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>13</td>
</tr>
<tr>
<td>Engineering</td>
<td>20</td>
</tr>
<tr>
<td>Agriculture</td>
<td>14</td>
</tr>
<tr>
<td>Law</td>
<td>5</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
</tr>
<tr>
<td><strong>Last formal education</strong></td>
<td></td>
</tr>
<tr>
<td>Senior high school</td>
<td>8</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>21</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>32</td>
</tr>
</tbody>
</table>

3.2. Variable Measurement

1. Tax Fairness

Tax fairness is taxpayer’ belief that the tax imposed is a fair tax. Four items were developed to measure the tax fairness. These items were based on finding in the tax fairness including factor such as procedural and distributive fairness, equity, equality, an example is “The tax institution treat taxpayers equally in a similar tax situations”. A high score on this scale indicates that the tax system is fair while a low score would indicate an unfair tax system. The cronbach alpha coefficient was 0,962 which indicated high internal reliability for the scale.

2. Communication

Communication in the present study is communication of tax information to the taxpayers. Key communication dimensions assessed by the questionnaire are quality and the quantity of information. Communication is measured by 4 items and 5 point likert type. A high score on this scale indicates high level of communication while a low score would indicate low level of communication. Cronbach alpha for this scale was also very good (0,909).
3. Trust
Trust rests on the belief that tax institution is competent, open, concerned and reliable (Butler, 1991; Mishra, 1993; Hosmer, 1995). Trust was measure using a 6 item Likert-type scale, an example of scale item is “I trust to the tax institution that they will transparently declare revenue and uses of fund from tax”. Taxpayer responded on a 5 point scale ranging from 1 (very low) to 5 (very high). A high numerical response indicates high degree of trust while a low numerical response indicates a low degree of trust. The cronbach alpha coefficient was 0.983 which indicated high internal reliability for the scale.

4. Voluntary Compliance
Voluntary compliance is accurate, timely and fully paid return without tax institution enforcement efforts. Five items were developed to measure taxpayer compliance. The items covered in this study consist of the accuracy to fill the tax form, the accuracy in calculating tax liability, timeliness, and voluntary. Taxpayer responded on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A high numerical response a perception indicates of high degree of taxpayer compliance. Cronbach alpha for this scale was very good (0.926).

3.3 Analysis Models
A path analytic technique was used to test the model of the study as shown in figure 1. This technique allows examination of the direct and indirect effect. In the model, the relationships between variables were specified by a series of path coefficients ($P_{ij}$) which are equivalent to standardized beta ($b$). The equations in the path model are shown as follows:

\[ X_3 = P_{31}X_1 + P_{32}X_2 + P_{3b}R_b \]  
\[ X_4 = P_{41}X_1 + P_{42}X_2 + P_{43}X_3 + P_{4c}R_c \]  

Where: $X_1$= tax fairness; $X_2$= communication; $X_3$= trust; $X_4$= voluntary compliance

The path analysis required the running of two regression equations – the first is for trust, and the second is for voluntary compliance. Test on the adequacy of the regression models indicate that the assumptions of the models were satisfied by the data. Tests normality indicates that the results of each model are fairly normally distributed. To diagnose multicollinearity, the variance inflation factors (VIFs) are examined for the predictors. VIFs ranged from a low value of 1.024 to a high value of 1.263

4. Results
As mentioned above, to test the two hypotheses developed in the present study, two regression equations were employed. The results of the equations are presented in table 2 and 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Path coefficient</th>
<th>Coefficient value</th>
<th>T value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>$P_{31}$</td>
<td>0.017</td>
<td>3.836</td>
<td>0.000</td>
</tr>
<tr>
<td>$X_2$</td>
<td>$P_{32}$</td>
<td>-0.120</td>
<td>-1.024</td>
<td>0.310</td>
</tr>
</tbody>
</table>

$R^2 = 0.706$; $F = 59,916$; $P = 0.000$

<table>
<thead>
<tr>
<th>Variable</th>
<th>Path coefficient</th>
<th>Coefficient value</th>
<th>T value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>$P_{41}$</td>
<td>0.514</td>
<td>5.001</td>
<td>0.000</td>
</tr>
<tr>
<td>$X_2$</td>
<td>$P_{42}$</td>
<td>0.077</td>
<td>0.833</td>
<td>0.408</td>
</tr>
<tr>
<td>$X_3$</td>
<td>$P_{43}$</td>
<td>0.322</td>
<td>3.128</td>
<td>0.003</td>
</tr>
</tbody>
</table>

$R^2 = 0.677$; $F = 34,259$; $P = 0.000$
4.2.1 Test of Hypothesis 1
The first hypothesis of the model requires a test of the expected positive and significant effect of tax fairness on voluntary compliance. Table 3 presents the results to test hypothesis 1. As shown in table 3, the effect of tax fairness on voluntary compliance is positive and significant \( (t = 5.001, p = 0.000 < 0.05) \). This means that the results of the path model provide strong support for hypothesis 1.

4.2.2 Test of Hypothesis 2
Hypothesis 2 states that there is an indirect effect of tax fairness on voluntary compliance through trust. To test hypothesis 2, the results of regression 1 (table 2) and 2 (table 3) are examined. The results presented in table 2 reveal the presence a positive and significant of direct effect between tax fairness and trust \( (t = 3.836, p = 0.000 < 0.05) \). Furthermore, according to the results of the second regression presented in table 3 that there is a positive and significant effect of trust on voluntary compliance \( (t = 3.128, p = 0.003 < 0.05) \). These results lead author to conclude that the two paths which form indirect effect of tax fairness on compliance behavior through trust significant, therefore \( H_2 \) could not be rejected.

4.2.3 Test of Hypothesis 3
It is expected in hypothesis 3 that there is a direct effect of communication on voluntary compliance. Table 3 provides the result to assess the direct effect. Table 3 reveals that the effect of communication on voluntary compliance is insignificant \( (t = 0.833, p = 0.408 > 0.05) \). Thus, this result could not provide support for hypothesis 3.

4.2.4 Test of Hypothesis 4
It is expected in hypothesis 4 that there is indirect effect of communication on voluntary compliance through trust. Table 2 and 3 provide the results to assess the indirect effect. Table 2 reveals that the effect of communication on trust is insignificant \( (t = -1.024, p = 0.310 > 0.05) \). Moreover, table 3 shows that the effect of trust on voluntary compliance is significant \( (t = 3.128, p = 0.003 < 0.05) \). Because one of the two paths is insignificant, thus it appears that the primary effect of communication on voluntary compliance is not via trust. These results could not provide support for hypothesis 4.

5. Discussion, Limitations and Conclusions
The purpose of the present study is to examine empirically the intervening role of trust in the relationship between tax fairness, communication and voluntary compliance. The results of this study add our understanding of the factors affecting voluntary compliance behavior. The findings of the present study contribute to tax compliance research by providing an explanation of the underlying causes of voluntary compliance. This study also provides results that show the “root causes” of non compliance to help tax institution to develop strategies toward improving compliance. Thus this study has the potential not only to contribute to the research literature but also assist regulators (tax institution) to make the effective tax law that could increase compliance behavior.

The findings of this study indicate that (1) the direct effect of tax fairness on voluntary compliance is positive and significant (2) the indirect effect of tax fairness on voluntary compliance through trust is positive and significant. This study is consistent with the findings of Etzioni (1986) and Bradley (1994) that tax fairness could increase compliance behavior. These results indicate that feeling of unfair tax system increase the propensity to evade. This finding is consistent with the previous researchers that taxpayer need and ability to pay were the most significant variables related to perceptions of a fair tax system. Also, the amount of taxes evaded increase when taxpayers perceived themselves to be victims of fiscal inequity.

However, these results also show that the direct and indirect effect of communication on voluntary compliance is insignificant. Communication involves two groups, the sender and the receiver, and each has unique responsibilities to ensure effective communication. If either or both parties fail to fulfill their responsibilities, there will be a communication breakdown. Sometimes the sender is to blame. The message may not be clear and accurate or simple enough to be understood by the receiver. It may be so badly presented, or so boring, or so complicated, that it fails to hold the receiver’s attention. Receivers can also cause problems. They may be unwilling to take in the message because they are too busy, or because they have made up their mind already, or because they are too prejudiced to hear the message clearly.
Several limitations of this study may be noted. First, this study focus only on three factors that influence compliance behavior. Other factors that influence compliance behavior may exist that were not examined in this study. Previous studies suggest the others variable that might influence taxpayers’ compliance, such as gender, age, probability of detection, tax morale. Second, this study covers only privately owned organizations within service industries. Generalizing these results to other industries could be done by further study. Finally, the survey research methodology allows for the examination of statistical associations at one point in time, and the statements about the direction relationships can only be made in terms of consistency of results with the effects proposed in the theoretical discussion. Future research can employ different research methods, for example longitudinal field studies to systematically examine the theoretical causal relationships proposed in this study.

References


